Radio Prospect In New Year Very Bright

Application of It in Every Form of Communication and Navigation Indicates Promise of Development

Radiophone Will Improve

Transmitting and Receiving Equipment Shows Signs of Increasing Efficiency

What will radio achieve during the ning year? That is the question hich permits us to speculate upon possible development and applica tion of the wonderful art, particularly since the progress made during the present year has been such that it clearly forecasts the future. Of course, so far as the general public is concerned, the paramount interest in radio is unquestionably in radiophone broadcasting. There is, however, one aspect of radio which will undoubtedly become an accomplished fact this broadcasting. There is a decomposed as a second which will undoubtedly become an accomplished fact this year that is of such outstanding importance to the progress of civilization that I am going to deal with it first. I refer to the first practical telephonic conversation across the Atlantic by means of radio on a basis that will meat commercial needs.

There is no doubt in my mind but that this will be done early in the coming year. It has been made possible by the preliminary experiments between the steamship America and the experimental radio station at Deal Reach, N. J., and also by the wonderful progress made in the development of high-power transmitting vacuum tubes.

made in the development of or transmitting vacuum tubes, that which has an output of a

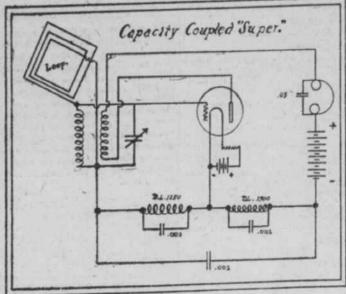
First Test Experimental While, of course, there is no doubt that the first real trans. Atlantic con-versation will be established during the year, it will really be in the nature of an experiment, and it may be two or

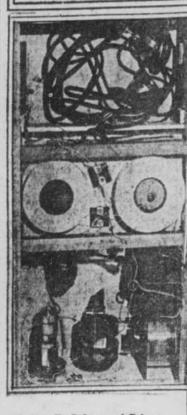
ist this bill should be passed,
Secretary of Commerce can
stricter control over the
situation, to the end that
y broadcasting stations will
out and the necessary staompelled to render a better

More Efficient Receivers Sure

obituary notices of many youthful o companies, and the country in ral will be far healthler as a re-

Portable Single Tube Super





ton, listening in on his unique set. Diagram of circuit above shows method of connecting fixed condenser across the tree duo-lateral coils.



W. Van B. Roberts, of Prince

Report of Tribune Institute Radio Laboratory for Week

Apparatus Tested and Approved Includes Crystal Set; Coil Mount; Crystal Holder; Telephone Diaphragm and Phonograph Attachment

> By Ralph K. Potter Tribuna Institute Engineer

The following apparatus and instruments were subjected to complete and thorough tests under actual working conditions in the radio

Novel Single **Tube Super** In Suitcase

Princeton Man Builds a Set Which Reproduces Loud Signals While He Walks Along Through Streets

Aerial Wound Round Box

Has Capacity Coupled Super Audible Circuit to Make Audible Circuit to Make

Its Portability Possible

Answer In order to get satisfactory results from the one stage audio-frequency amplifier, which will be at-

Capacity Coupling Employed Capacity Coupling Employed off the signals. In order to eliminate the necessity of ally leaks off t

The chainer when the states of the control of the chainer when the chainer

First Aid for the Radio Fan | Condenser Very | and cause a short circuit

Tubes for Single Super

Dry Cell Battery Used

The tube used is a V. T. I. and its lament is operated by four dry cells ranged in series parallel. This is unficient to operate the set for quite a considerable time. The "R" butterles are of the small type for convenience. In connection with the tuning of this set, Mr. Roberts says: "There are only and the U. V. 201 in the sudio-frequency side.

Vary the Grid Leak

Answer—From your letter it would seem that the trouble lies in your grid loak, I should judge that the leak has too high a resistance, and the consequence is that too large a negative charge becomes lodged upon the grid and paralyses the tube, thus shutting off the signals. As the charge gradually leaks off the tube comes back to

Adding Audio to the Single Tube Super; Cause of Tube Paralyzing and Remedy; How to Connect "C" Battery for WD-11

Making a Loop Aerial

Gets Good Distance Recalls

Answer—I want to congratulate you that it would tend to shortpon the very excellent results that ou are obtaining. The new station at Havana operates on a 400-meter should be strong enough, so far as are length. The call letters for this tation are PWX, and it is approxitation are pwx.

Great Care Should Be Paid to It So Losses May Be Avoided, Especially in Rotor Contacting Device

Important in Radio Set

Should Be Kept Dustproof

Simple Test for Finding a Short Circuit of Plates in Condenser Described

To-day's Radio Program

Sunday, December 31 WJZ, Newark (360 moters)

1 a. m.—Musical program.
1 a. m.—Morning services at St Thomsa's Church. Sermon by the Rev.
Ernest M. Stires, D. D. T. Tertius
Koble, M. A. organist, will direct the
men's and boys' choir of sixty voices.
p. m.—City Symphony concert at the
Century Theater.

WEAF, New York (400 meters)
4:00-4:45 p. m.—Musical program by
the Capitol Theater grand orehestra
of seventy-eight pieces; barytops

W. Wenord T. Bunean minister.
2:45 p. m.—Children's Bible story by
the Rev. W. A. Logan.
3 p. m.—Fred Lotz, orangist and choir
director. the Capitol Theater grand crehestra
of seventy-eight places; barytone
allo by Eric Bye; tenor solo by A.
Jaegel; duet by Evelyn Herbert, soprano, and Robert Davis, tenor.
139-7:35p pm.—Musical program from
the Capitol Theater repeated.
1:45 p.m.—Services of the First Presbyterian Church, Rev.
Maitland
Alexander, D.D., pastor.
12:00 p.m. (midnight)—Special concert.

prano, and Robert Davis, tenor.

1:39-7:25p.m.—Musical program from the Capitol Theater repeated.

1:45p.m.—Broadcasting of the chimes of Trinity Church, New York City, played by Walter Clark. Program:

"Changes," "Nearer, My God, To Thee," "Holy, Holy, "Good King Wenceslas Looked Out," "Lead, Kindly Light." "O. Come All Ye Faithful," "O. Come All Ye Faithful," "America," "Old Kentuck, Home." "Flow Gonly, Sweet Afton."

"We Three Kings of the Orient Are," "Auld Lang Syne," "Home, Sweet Home."

"Auld Lang Syne," "Home, Sweet Home."

At the Covenant, WWJ, Detroit (400 meters)

2 p. m.—"Detroit News" Or Lestra.

8:30 p. m.—Church services.

KYW, Chicago (400 meters)

4:30 p. m.—Church services.

Distance Features To-day (Eastern Standard Time) Medford Hillside, Mass. (369

60 p. m.—"The Family Circle"; the Treble Clef Club of Winthrop; Hazel Shaw, director; Myrtle Floyd, planist. 130 p. m.—Boston police reports.
130 p. m.—Church service conducted by Rev. Eric I. Lindh. 9:00 p. m.—Quartet of the Plymouth Congregational Church

p. m.—Vesper services conducted by the Rev. G. Morris Smith. Specia

CKAC, Montreal (43 meters)

Philip A. Frick pastor. Addresses by

business men: chorus of 100

orchestra. Service will end at 12:05 KDKA, Pittsburgh (360 meters) 10:45 s. m. - Services of the Emory Methodist Episcopal Church, Rev. W. Wofford T. Duncan minister.

12:00 M. Religious services of Church of the Covenant.

4:30 p. m. Church services

M. E. P. C.

Radio Division, 36 Spring Street, Newark, New Jersey

The principle of the APLAS AM-PLITONE's made effective through a serial formal new pationted invention, supported by high grade materials with excert workmanning employed in its construction.

The ATLAS AMPLITONS UNIT without horn and base but with Graphonds attachment converts any standard phenograph, except the Brunswick, in the highest grade of loud sneaher. The ATTAN AMPLITONE UNIT embl.s you to economies buth in ax-penditure and in the scace occupied by your equipment, assuming that you already have a bose and horn or you want to make from your phonograph, an efficient loud speaker.

The ATLAS AMPLITONE UNIT WE offer for \$12.50 each, F. O. B. our factory. Newsell, and our graphonels attachment will cost you \$1.68.



If your jobber and dealer are sold out n our Atlas Head Phones or Atlas

Radio Division MULTIPLE ELECTRIC PRODUCTS CO., Inc. We are signing off and wishing our Radio friends A Very Happy New Year.

New Dutch Broadcast Station

Government Wave Meter



WILL A LOOP RECEIVER OPERATE A LOUD SPEAKER ON DISTANT STATIONS.





RUSONITE CATWHISKER 25 Order from your dealer of direct from RUSONITE PRODECTS CORF. 15 Park flow, N. V.

RADIO BOXES Stock and Special Sizes operer your set with a well man next appearing cabled il Orders Receive Prompt Attende

B. E. JARVIS, Inc.

RUSGEDNESS AND HANDSOM APPEARANCE ARE COMBINED IN "LOCE SPEAKER

Chas. Cory & Son, Inc., 183 Yarick St., No.